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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/822,543	03/30/2001	Basuki Afandi Sugiarto	M-10973 US	7668
27774	7590	03/29/2005	EXAMINER	
MAYER, FORTKORT & WILLIAMS, PC 251 NORTH AVENUE WEST 2ND FLOOR WESTFIELD, NJ 07090			JUNTIMA, NITTAYA	
			ART UNIT	PAPER NUMBER
			2663	

DATE MAILED: 03/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/822,543	SUGIARTO, BASUKI AFANDI	
	Examiner	Art Unit	
	Nittaya Juntima	2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the amendment filed on 12/6/2004.
2. The objections to the claims are withdrawn in view of applicant's amendment.
3. Claim 13 has been cancelled as per applicant's amendment.
4. The indicated allowability of claims 1-22 is now withdrawn in view of the newly discovered reference(s) to Rai et al. (USPN 6,421,714 B1) and Bahl et al. (USPN 6,834,341 B1).
5. Claims 1-12 and 14-22 are presently rejected under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-12, and 14-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rai et al. ("Rai") (USPN 6,421,714 B1) in view of Bahl et al. ("Bahl") (USPN 6,834,341 B1), and further in view of Calhoun (USPN 6,463,475 B1).

Regarding claims 1, 17, 21 and 22, as shown in Fig. 2, Rai teaches a system comprising:

A router (54) coupled to a base station (36), wherein the base station transmits and receives wireless signals to and from the modems coupled to computers (32). See col. 5, ll, 56-col. 6, ll 15.

Art Unit: 2663

A switch (router 42) in communication with the router (54) via a communication path, and the router (54) routes signals between the base station (36) and the switch (router 42) via the communication path, the switch (router 42) routes signals between the router (54) and first and second ISPs (two ISPs in 46) via wired communication paths (col. 5, ll. 56-col. 6, ll. 29).

Rai fails to teach a tunnel switch and the router imposing a first and a second predetermined signal bandwidth limits as recited in the claim.

Regarding the router imposing a first and a second predetermined signal bandwidth limits, as shown in Fig. 3A, Bahl teaches the router (110a) imposes a first predetermined signal bandwidth limit between the modems and the first ISP (an ISP of the ISPs in 105), and a second predetermined signal bandwidth limit between the modems and the second ISP (another ISP of the ISPs in 105) in order to accommodate different service levels with different bandwidth limits provided by different ISPs to the subscribed clients, col. 5, ll. 57-67, col. 10, ll. 40-44, and col. 16, ll. 31-40.

Given the teaching of Bahl, it would have been obvious to one skilled in the art to modify the teaching of Rai to include the router imposing a first and a second predetermined signal bandwidth limits as recited in the claim. The suggestion/motivation to do so would have been to provide different service levels for accessing the Internet/ISPs including different bandwidth allocations to the users as taught by Bahl (Abstract).

Regarding a tunnel switch, in an analogous architecture, Calhoun teaches using a tunnel switch (100, Fig. 2) to route the traffic to a plurality of destinations (col. 4, ll. 8-45).

Given the teaching of Calhoun, it would have been obvious to one skilled in the art at the time the invention was made to modify the combined teaching of Rai and Bahl to include the

Art Unit: 2663

tunnel switch, e.g. replacing Rai's switch (router 42, Fig. 2) with Calhoun's tunnel switch, into the combined system of Rai and Bahl as recited in the claim. The suggestion/motivation to do so would have been to implement security access and switch the user traffic to a tunnel destination, e.g. destination ISPs, as taught by Calhoun (Abstract).

Regarding claim 2, Rai does not teach that the router uses a software interface to impose the first and second pre-determined bandwidth limits. However, Bahl teaches that the router (110a) uses a software interface to impose the first and second pre-determined bandwidth limits (col. 10, ll 11-15, 26-44). Therefore, it would have been obvious to one skilled in the art to include that the router uses a software interface to impose the first and second pre-determined bandwidth limits. The motivation/suggestion to do so would have been to automatically and systematically implement various functionalities including imposing the bandwidth limits without constant human intervention.

Regarding claims 3 and 4, Rai does not teach that the router uses a hardware interface/a circuit and software interface to impose the first and second pre-determined bandwidth limits.

However, shown in Fig. 3A, Bahl teaches that the router (110a) uses a hardware interface/a circuit and software interface to impose the first and second pre-determined bandwidth limits since the router (110a) is a physical device which must include a hardware interface/a circuit interface that collectively under control of software components of PANS server 302 and Policy Manager 304 route the user traffic to/from the ISPs 105 according to the subscribed service levels (col. 10, ll 11-44, and further col. 7, ll 7, ll 53-57 and Fig. 2).

Therefore, it would have been obvious to one skilled in the art to modify the teaching of Rai to include the router uses a hardware interface/a circuit and software interface to impose the

Art Unit: 2663

first and second pre-determined bandwidth limits as recited in the claims in order to successfully accommodate the subscribed service levels/bandwidth limits to the user.

Regarding claims 5 and 18, Rai teaches directing signals between the first ISP (one ISP in ISPs 46) and at least one modem (32) and direct signals between the second ISP (another ISP in ISPs 46) and at least modem (32). However, Rai fails to teach the tunnel switch using a first Layer 2 Tunneling Protocol and a second Layer 2 Tunneling Protocol to direct the respective signals.

However, Calhoun teaches the tunnel switch (100, Fig. 2) using a Layer 2 Tunneling Protocol (col. 4, ll 8-45).

Given the teaching of Calhoun, it would have been obvious to one skilled in the art at the time the invention was made to modify the teaching of Rai to include that the tunnel switch using a first Layer 2 Tunneling Protocol and a second Layer 2 Tunneling Protocol as recited in the claim. The suggestion/motivation to do so would have been to implement security access and switch the client traffic to each of the tunnel destinations, e.g. each of the destination ISPs, as taught by Calhoun (Abstract).

Regarding claim 6, Rai further teaches that the signals between the modems (32, Fig. 2) and base station (36, Fig. 2) comprise emails (col. 5, ll 11-15).

Regarding claims 7-10, 19, although Rai teaches that the signals also include WWW contents and streaming media protocols (col. 5, ll 11-17), Rai does not explicitly teach that the signals between the modems (32, Fig. 2) and base station (36, Fig. 2) comprise requests for Internet content, motion pictures and requests for motion pictures, music videos and requests for music videos, video games and requests for video games. An examiner notice is taken that

Art Unit: 2663

various types of traffic being communicated and available to/from Internet users include requests for Internet content, motion pictures and requests for motion pictures, music videos and requests for music videos, video games and requests for video games. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the teaching of Rai to include that the signals comprise requests for Internet content, motion pictures and requests for motion pictures, music videos and requests for music videos, video games and requests for video games which can be communicated to/from and available to Internet users.

Regarding claim 11, as shown in Fig. 2, Rai teaches that the modems (32) and the base station (36) must maintain a substantially continuous wireless communication connection (col. 5, ll 56-col. 6, ll 15).

Regarding claim 12, Rai fails to explicitly teach that the communication paths connecting to ISPs 46 in Fig. 2 comprise fiber optic cable. However, an examiner notice is taken that it is well known to use fiber optic cable in network system to provide low data loss, high-speed transmission, and freedom from electromagnetic interference and grounding problems. Therefore, it would have been obvious to one skilled in the art to modify the teaching of Rai to include the communications that comprise fiber optic cable in order to take advantage of fiber optic cable benefits including low data loss, high-speed transmission, and freedom from electromagnetic interference and grounding problems.

Regarding claim 14, Rai teaches that the modems are integrated with the computers (col. 5, ll 56-67).

Regarding claims 15 and 20, Rai does not teach that the router imposes a first pre-determined signal bandwidth limit between the router and the tunnel switch for the first ISP, and

Art Unit: 2663

a second pre-determined signal bandwidth limit between the router and the tunnel switch for the second ISP as recited in the claim.

However, as shown in Bahl's Fig. 3A, it is inherent that the component 110a must impose a first predetermined signal bandwidth limit between the component 110a and a Host Organization network 104 for an ISP in ISPs 105, and a second predetermined signal bandwidth limit between component 110a and the a Host Organization network (104) for another ISP in ISPs 105 since different service levels with different bandwidth limits to/from different ISPs are provided to the subscribed clients, col. 5, ll 57-67, col. 10, ll 40-44, and col. 16, ll 31-40.

Given the teaching of Bahl, it would have been obvious to one skilled in the art at the time the invention was made to modify the combined teaching of Rai and Couhoun (see rejection of claim 1) such that the router imposes a first pre-determined signal bandwidth limit between the router and the tunnel switch for the first ISP, and a second pre-determined signal bandwidth limit between the router and the tunnel switch for the second ISP as recited in the claim. The suggestion/motivation to do so would have been to provide different service levels for accessing the Internet/ISPs with different bandwidth allocations to the users as taught by Bahl (Abstract).

Regarding claim 16, as shown in Fig. 2, Rai teaches a system comprising:

A router (54) coupled to a base station (36), wherein the base station transmits and receives wireless signals to and from the modems coupled to computers (32). See col. 5, ll, 56-col. 6, ll 15.

A switch (router 42) in communication with the router (54) via a communication path, and the router (54) routes signals between the base station (36) and the switch (router 42) via the

Art Unit: 2663

communication path, the switch (router 42) routes signals between the router (54) and first and second ISPs (two ISPs in 46) via wired communication paths (col. 5, ll. 56-col. 6, ll. 29).

However, Rai fails to teach a tunnel switch and imposing a first and a second predetermined signal bandwidth limits as recited in the claim.

Regarding a tunnel switch, in an analogous architecture, Calhoun teaches using a tunnel switch (100, Fig. 2) to route the traffic to a plurality of destinations (col. 4, ll. 8-45).

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to modify the teaching of Rai to include a tunnel switch, e.g. replacing Rai's router 42, Fig. 2 with Calhoun's tunnel switch, into the system of Rai as recited in the claim. The suggestion/motivation to do so would have been to implement security access and switch the user traffic to a tunnel destination, e.g. destination ISPs, as taught by Calhoun (Abstract).

Regarding imposing a first and a second predetermined signal bandwidth limits, as shown in Fig. 3A, Bahl teaches imposing a first predetermined signal bandwidth limit between the modems and the first ISP (an ISP of the ISPs in 105), and a second predetermined signal bandwidth limit between the modems and the second ISP (another ISP of the ISPs in 105) in order to accommodate different service levels with different bandwidth limits to/from different ISPs to the subscribed clients, col. 5, ll. 57-67, col. 10, ll. 40-44, and col. 16, ll. 31-40.

Given the teaching of Bahl, it would have been obvious to one skilled in the art to modify the combined teaching of Rai and Calhoun to include imposing a first and a second predetermined signal bandwidth limits such that the tunnel switch would impose a first and a second predetermined signal bandwidth limits as recited in the claim. The suggestion/motivation

Art Unit: 2663

to do so would have been to provide different service levels/bandwidth allocations for accessing the Internet/ISPs to subscribed uses as taught by Bahl (col. 5, ll 57-67).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


- Short et al. (USPN 6,789,110 B1), disclosing providing different bandwidth limits/ISPs to wireless users (Figs. 1-7).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nittaya Juntima whose telephone number is 571-272-3120. The examiner can normally be reached on Monday through Friday, 8:00 A.M - 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nittaya Juntima
March 24, 2005
NS


RICKY NGO
PRIMARY EXAMINER 3/28/05